Iowa Department of Human Services

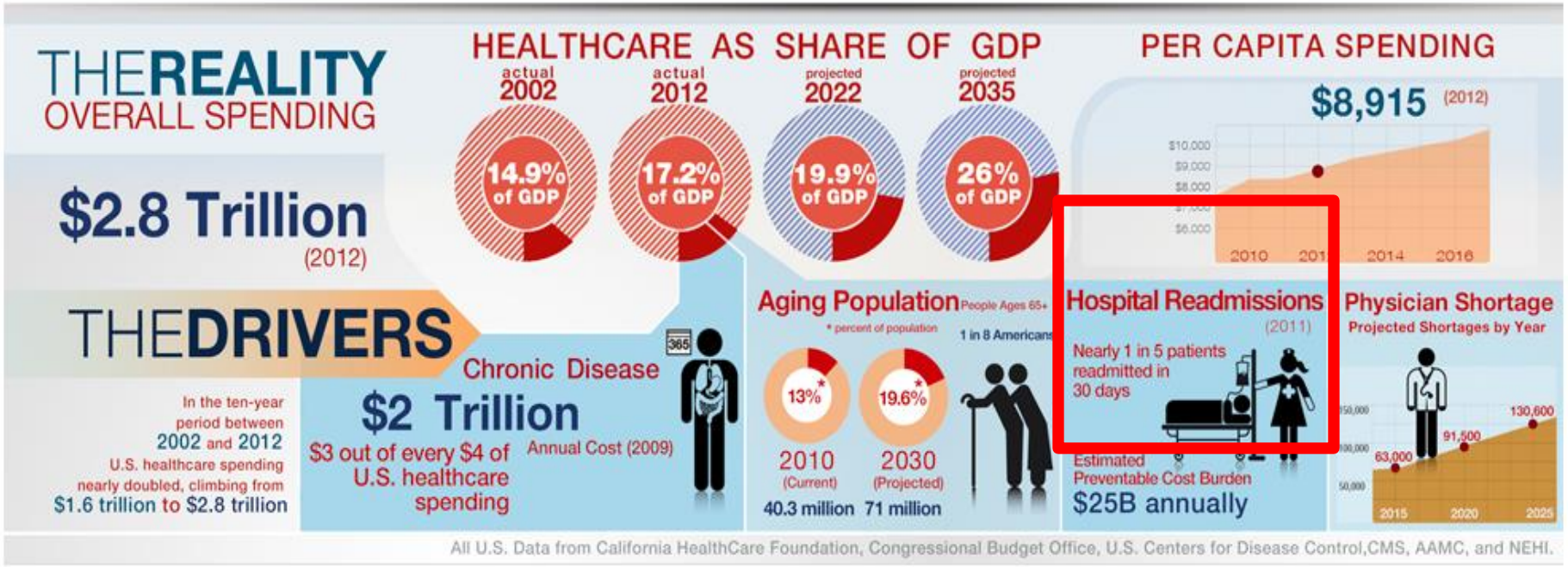
Statewide Alert Notification (SWAN) System

Andi Bryan

May 2016

Using Health IT to improve health outcomes through SIM

Current State



Care Coordination

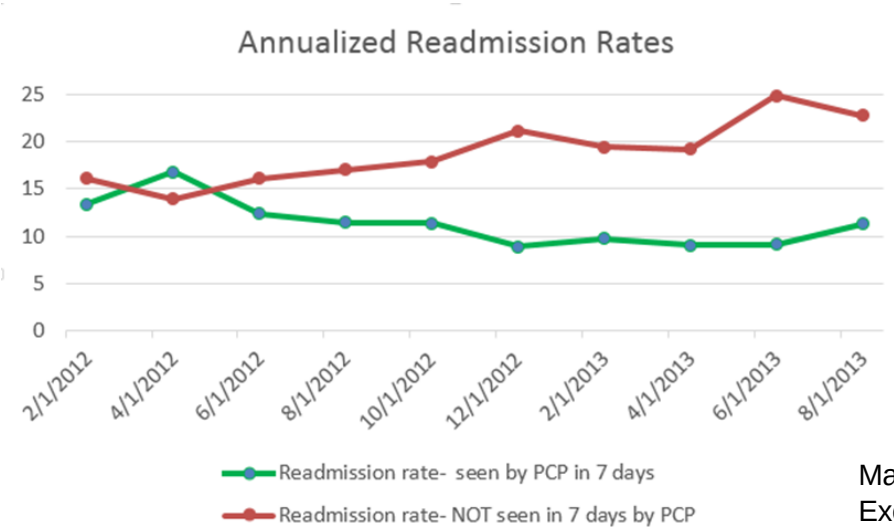
- Care teams are not aware of patient hospitalization or discharge for prompt follow up
- Cumbersome for care teams to exchange the information and monitor conformance
- Care teams span multiple organizations, systems, technical capabilities

You don’t know… what you don’t know

How long does it take a care team to learn a high-risk patient was admitted for chest pain to another hospital in another city?

- **Costs can go up the longer you are unaware that a member was admitted to another ER or Inpatient while traveling out of town.**
- **It would be helpful if Care Coordinators were notified of this right away for specific members.**
- **While possible today it is not being done across organization boundaries.**

Examples of Reduction in Avoidable Readmission

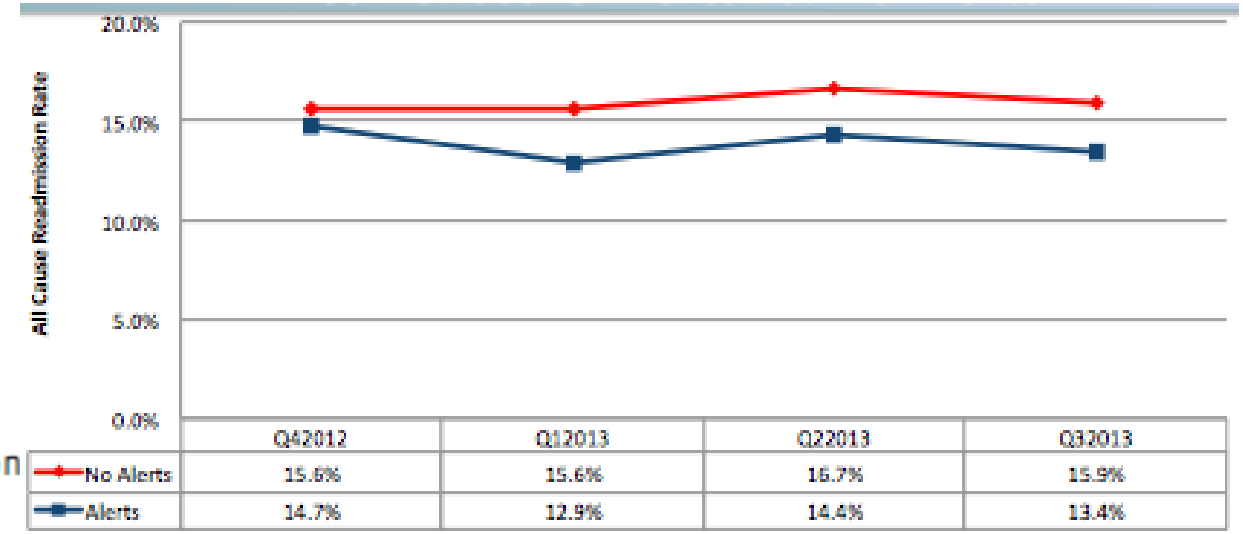


Maryland Health Information Exchange /Johns Hopkins

30%

Reduction in readmissions

A care transitions intervention reduced 30-day hospital readmissions by 30 percent



	Q42012	Q12013	Q22013	Q32013
No Alerts	15.6%	15.6%	16.7%	15.9%
Alerts	14.7%	12.9%	14.4%	13.4%

Rhode Island Institute of Quality

Moving beyond basic connections to interoperability and intelligence

SmartAlerts

- **Start with Admission, Discharge, Transfer (ADT) events**
- **ADT comes from a mature part of the hospital information system and has been available for some time.**
- **ADT connections are common within organizations but not statewide**
- **Start simple… build on it**

Start Simple

- Three Use Cases initially:
  - Emergency Department Discharge
  - Inpatient Admission
  - Inpatient Discharge
- Principles:
  - Alerts must have enough information to act
  - Must be timely
  - Must be used by care teams to improve outcomes

ADT Trigger Events

Possible if the data comes

- Admit/visit notification.
- Transfer a patient
- Discharge/end visit
- Register a patient
- Pre-admit a patient
- Change an inpatient to an outpatient
- Update patient information
- Cancel admit/visit notification
- Cancel discharge/ end visit
- Swap patients
- Merge patient information
- Add person information
- Update person information
- Merge patient information ID only
- Merge patient information account number only
- Merge visit – visit number

Who – Patient

What – Admits and Discharges

When – Real Time

Where – Inpatient and ER,

Why – To inform immediately

How to make this happen

Build it:

- Connect all hospitals in Iowa to send ADT records to the Statewide Smart Alert engine.
- IME provides the patient lists for the system to use to route Event Alerts.

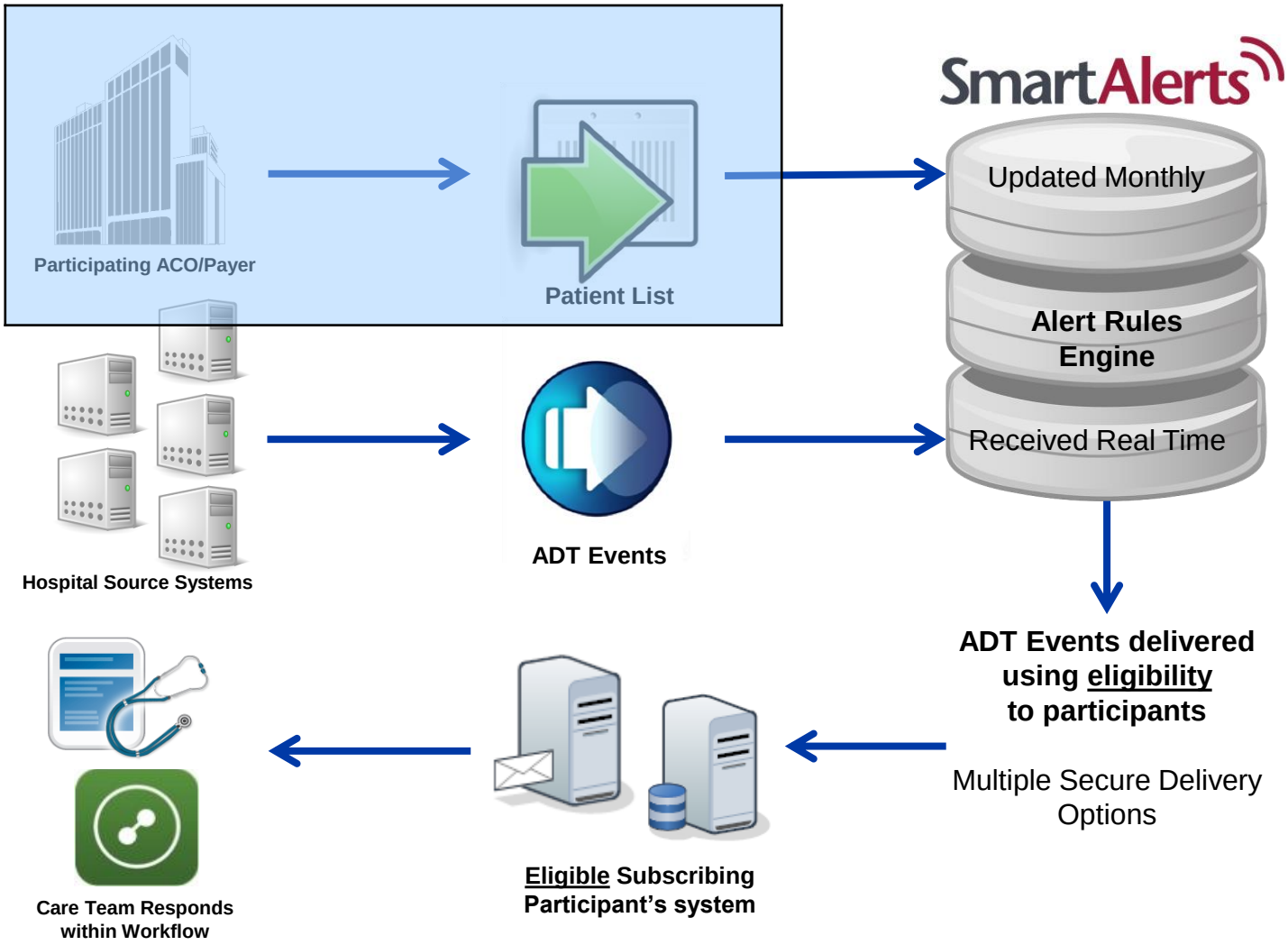
Use it:

- Care Coordinators set up to receive and use to improve health outcomes.

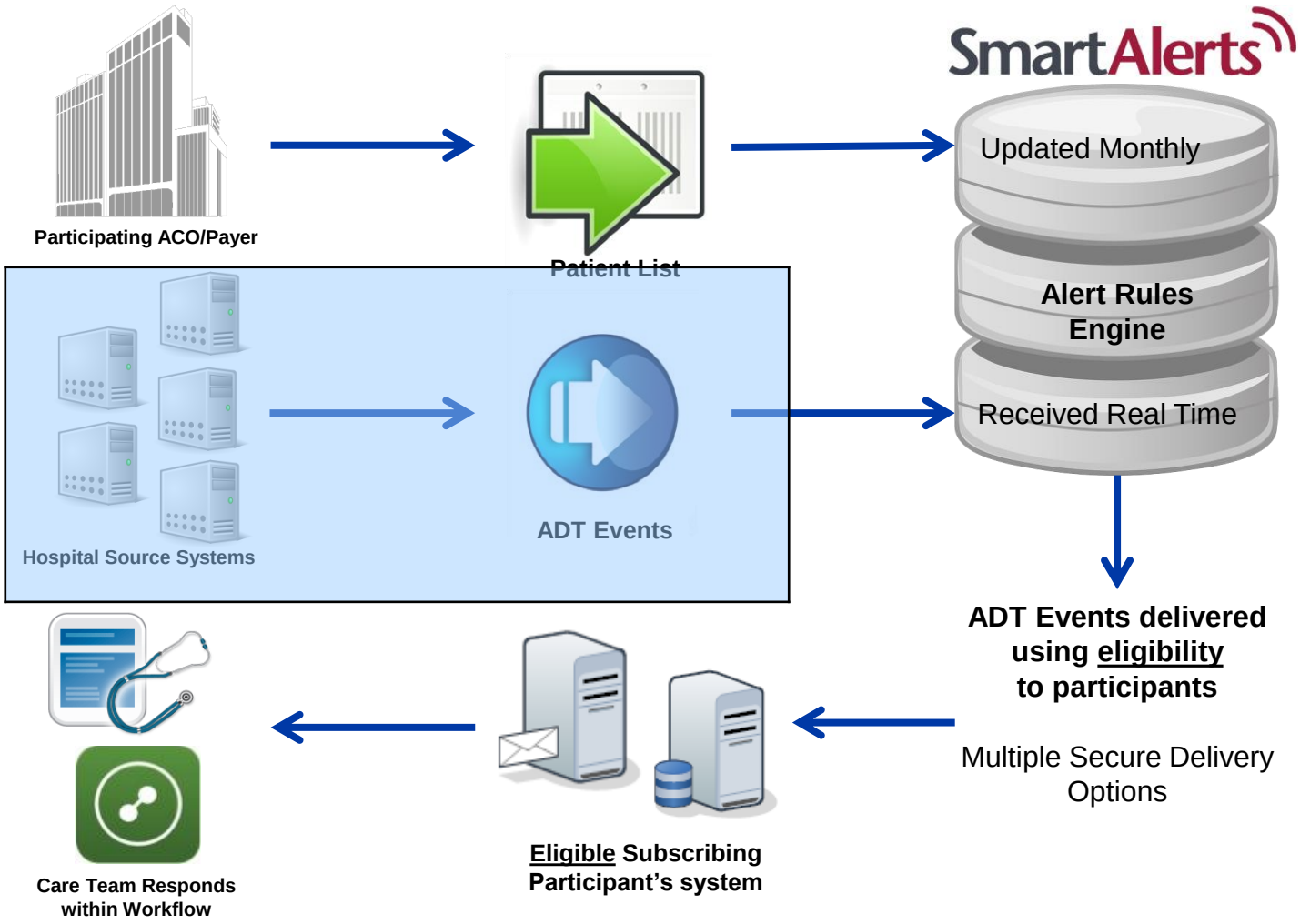
Initial Roll-out

- Three identified Use Cases:
  - ED Discharge
  - Inpatient Admission
  - Inpatient Discharge
- Must have participation from hospitals in each ACO
- Limit alerts to direct feeds at the ACO level only
- Medicaid members with PCP assignments

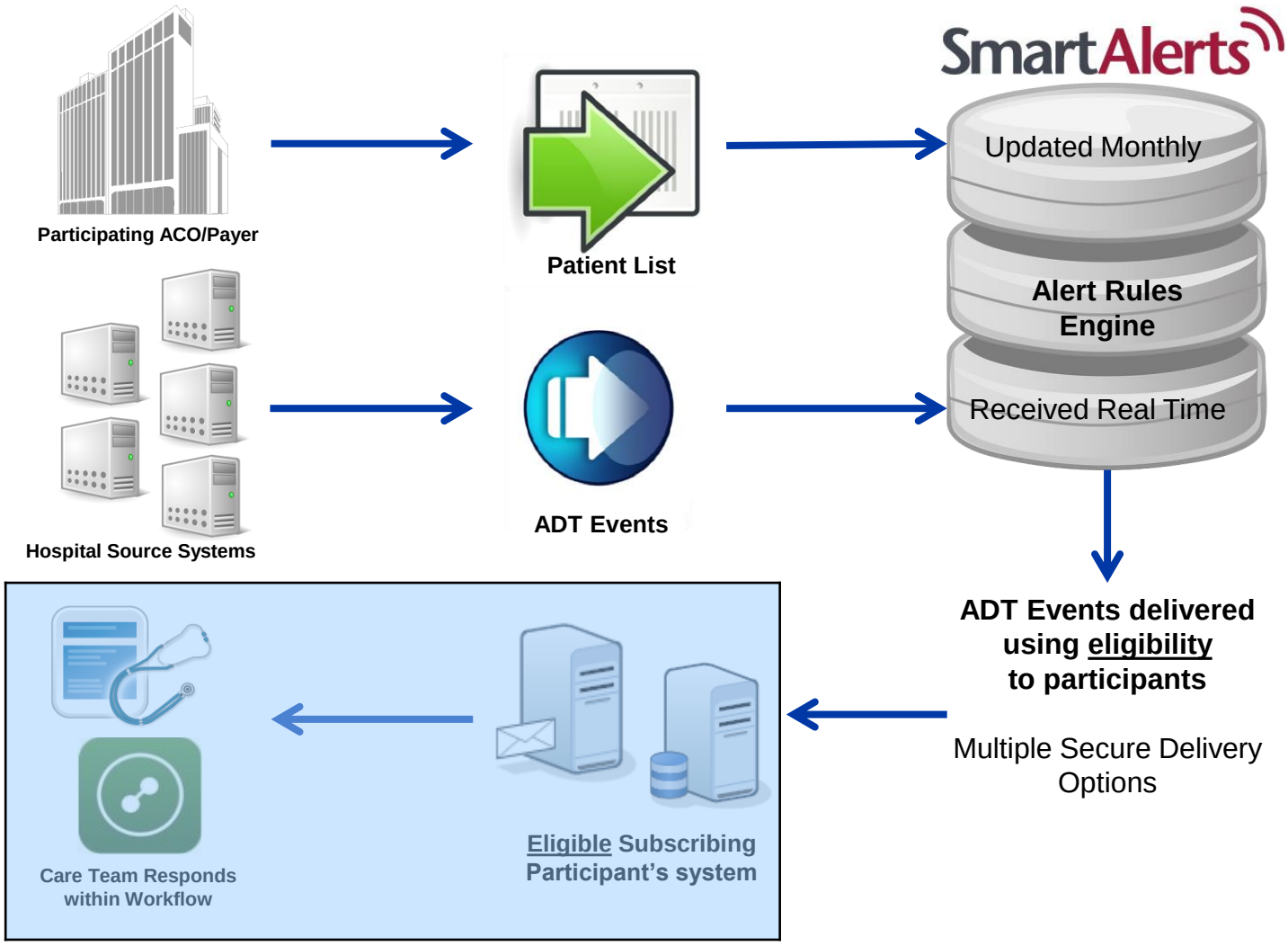
Statewide Alert Notifications (SWAN)



Statewide Alert Notifications

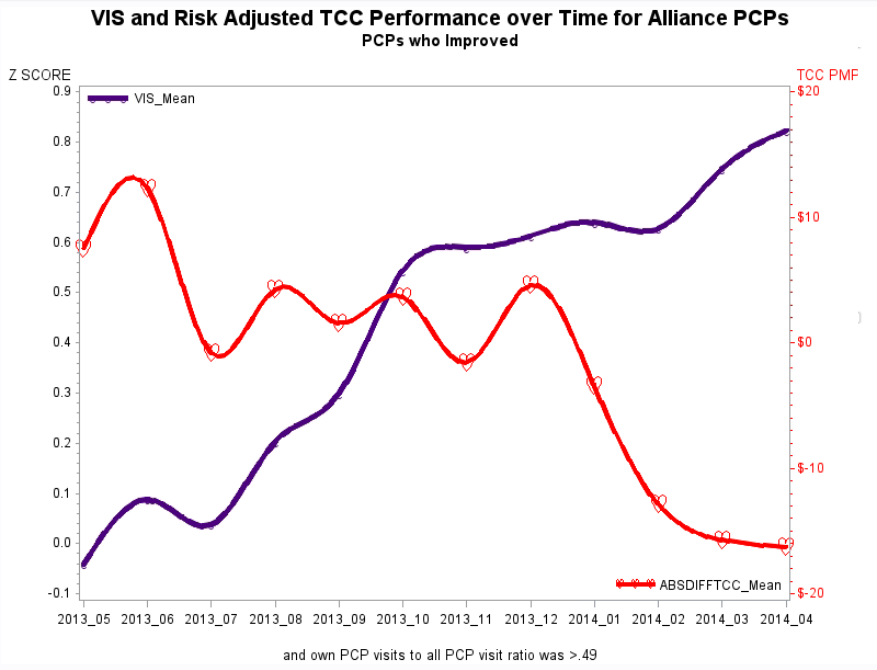


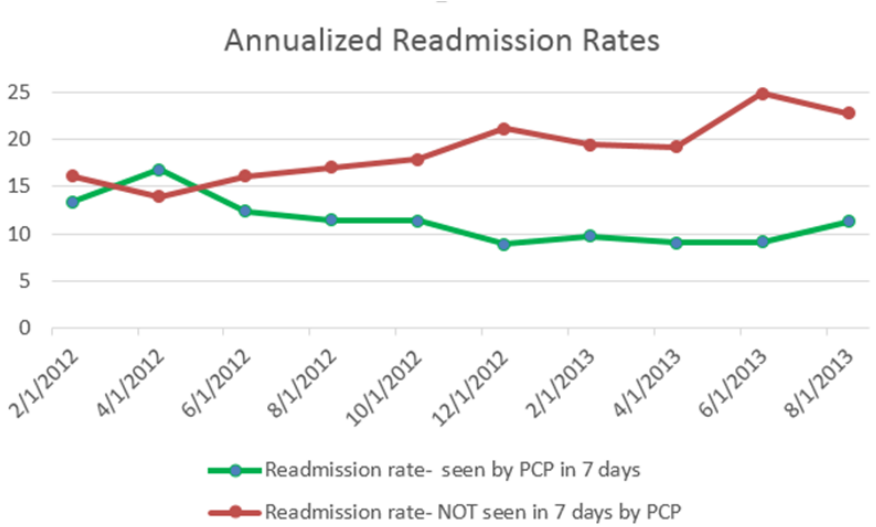
Statewide Alert Notifications



ADT Data impacts VIS Measures

- Chronic and Follow-Up Care Measures:
  - 30 day Potentially Preventable Readmissions
  - PCP Visit 30 Days Post Discharge





Maryland Health Information Exchange /Johns Hopkins

Current state

- Currently receiving ADT's from 21 hospitals
- Another 15 hospitals should be connected and sending ADT's by early June
- 4 ACO's receiving alerts including Broadlawns, Unity Point, Iowa Health+ and The University of Iowa Health Alliance. Mercy currently in process and should be receiving them by early June
- 1,189 total alerts for Medicaid patients who had an event outside of their assigned ACO in April

Health IT Win!

WIN!: Statewide Alert Notification System (SWAN) data doing good things at the Point of Care

Who: Mr. Smith is an elderly man with congestive heart failure, history of MI, HTN, A-Fib, stage 3 CKD, PE, on long term anti-coag, Pulm htn and metastatic cancer. He's been in and out of several area hospitals in the last month…

When: March 2016

Where: Family Health Center – Broadlawns Medical Center

Why: FHC was alerted to his admission on the 16th, at which point staff/providers were able to fax his records to Lutheran, including Coumadin therapy management for the last 3 months (which was crucial for management of what turned out to be a critical cardiac issue).

What: On 3/17, before he was even discharged from Lutheran, we had records from Lutheran and were in the process of getting coag management set up through a home health agency and a PCP follow up appointment made. Upon discharge, providers at Lutheran and BMC had already shared medical records and collaborated on a discharge plan which included hospice care and medical management of his chronic diseases performed at home with VNS – this will help keep Mr. Smith at home, where he's comfortable, and presumably, out of the hospital.

Benefits: Have been able to contact patients – who would otherwise have been lost to follow up – 6 times in just the last few weeks. Includes a patient started on insulin, a new cardiac diagnosis, surgical follow up and a DM foot ulcer – all of which require follow up by PCP. Good Stuff**!**

Future plans

- Working to develop a plan to implement the SWAN alerts in the C3 Communities

- Continuing to work to connect all hospitals in the State of Iowa as the long term plan is for the SWAN to expand to a greater population then only Medicaid patients.

Resources

Website:
http://dhs.iowa.gov/ime/about/state-innovation-models

Emails:

andrea.bryan@iowa.idph.gov

IMEHealthIT@dhs.state.ia.us

mbussel@dhs.state.ia.us